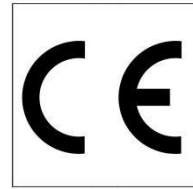
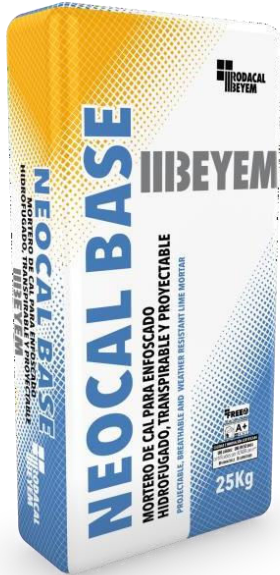


Beyem Neocal Base

Breathable and rainwater-proof lime mortar
suitable for spray machines



EN 998-1



Indoor environment quality
Very low VOCs emissions



No harmful
emissions



Certificate n°
QAI.MC.27/20
UNE-EN 16000-09

Free of radionuclides




Free of Radon
"Radiation-free Certificate"
IAF- Radioökologie GmbH

About this product

BEYEM NEOCAL BASE is a breathable and rainwater-proof rendering lime mortar, suitable for both building rehabilitation and new construction. Formulated with mixed binders, lime, selected white aggregates, and special additives. Especially suitable for rehabilitation of historic and/or protected buildings (old masonry walls). Suitable for combating rising and condensation damp. Indoor environment quality. Classified as A+ class according to Décret n°. 2011-321 (France). Free of radionuclides.

Benefits

- Suitable for spray render and pump machines or manual applications.
- Mechanical strengths corresponding to lime mortars.
- High water vapour permeability. Allows the wall to breathe.
- Great plasticity.
- Compatible with old masonry brickworks/walls.
- Applicable directly to the building enclosure.
- Rainwater- proof. Weather resistant.
- Suitable for internal or external walls.
- New construction and building rehabilitation.
- Very low VOCs emissions.
- Radiation-free certificate.
- Mineral product. 

Use

Thick bed rendering lime mortar for both building rehabilitation and new construction. Suitable to compensate uneven surfaces and flatness of the support. Ribbed metal wall panels especially designed for mortars. Especially suitable as a basecoat for BEYEM NEOCAL FINO finish. For grouting stonework. Suitable for walls and ceilings both in interior and exterior situations, manually or mechanically.

Substrates

BEYEM NEOCAL BASE is suitable for:

- Cladding in renovation/restoration work
- Brick walls, thermo-clay walls...
- Stonework
- Traditional mortar plastered surfaces
- Cellular concrete blocks

Preparation of substrates

Substrates must be clean, compact and free of substances that reduce adhesion such as dust, oil, grease and with no loose material. Substrates must submit an adequate porosity and surface roughness. Uneven areas must be corrected. Dampen substrates with water to cool down if they should be too warm, in case of wind or over absorbent substrates and wait until the thin layer of water disappears. It is a good practice curing with a fine spray of clean water 24 h after application. Curing operation is essential to avoid rapid drying and depends on the degree of porosity and surface absorption. If necessary, fill in the gaps of the substrate with BEYEM NEOCAL BASE and let harden.

Do not apply on gypsum-based plasters, paint, metal surfaces, plastic, surface waterproofing products or materials with low mechanical properties. Consult our technical department to apply on cellular concrete.

Instructions for use

Mix manually or mechanically BEYEM NEOCAL BASE with 4,5-5,0 l per bag of clean water until a homogeneous, creamy and lump-free paste is obtained. Let the mix stand for 5 minutes before application. To apply with render spray machine, it's necessary to set the relation water/mortar and pump pressure depending on section and length of hose and climatology conditions. It's important to maintain the variables affecting the properties of the applied mortar (distance to the wall, angle of application and water proportion).

Spread the mixed product with a trowel (in case of manually or mechanically application) leaving 10-15 mm of average thickness depending on the desired finish. Thicknesses up to 30-40 mm can be applied in layers of 15 mm thick per day. Mark the pieces using PVC splines. Press to ensure adhesion and expel the air contained in the pores. Smooth with a ruler the applied material to regulate thickness. When BEYEM NEOCAL BASE is green (set but not fully hardened) it should be finished using the appropriate tool depending on the desired texture (trowelled, scraping...). Time until finishing depends of substrate, temperature and humidity.

Cautions and recommendations

- Always mix with the specified amount of water.
- Do not apply below 5° or above 30°C.
- Do not apply when there is risk of frost, rain, strong wind or direct sunlight.
- It is not advisable to apply on horizontal or sloped surfaces in exterior situations.
- Protect top edges of facade from rainwater penetration.
- Above 15 mm of thickness, apply the product in two layers, leaving a roughness surface in the first to improve the adhesion of the second layer.
- The minimum finishing thickness of render must be 10 mm, to contribute actively to the waterproofing of surface.
- Lime mortars have a slower setting, so the hardening time increases.
- Expansion joints should be included as required by the substrate and respected by all applied materials.
- Reinforcement with alkali resistant fiberglass mesh may also be required, dependent upon substrate condition (junctions of different surfaces, corners of voids...), project specification or applied thickness greater than recommended.
- As a basecoat mortar, is recommended to leave a rough finish.
- GP CSII W₂C version available upon request.
- In the case of cellular concrete blocks, brush the surface thoroughly to remove surface dust, then wet the substrate and wait until the surface sheen disappears before applying the mortar. Take all necessary precautions: wet the mortar, use primer, etc.
- When necessary (highly porous surfaces) or in extreme weather conditions (strong winds or high temperatures), it is necessary to lightly spray the product with water the day after application

Technical data

Product identity. Properties of mixture and application data

Appearance	Powder
Color	White
Bulk density	≈ 1400 Kg/m ³
Density of the mix	≈ 1750 Kg/m ³
Grading	0-2 mm
Mixing water,%	± 19 %
Minimum finishing thickness	10 mm
Maximum thickness per layer	15 mm
Maximum thickness application	40 mm (three layers)
Coverage	16 Kg/m ² per cm of thickness
Tariff code	3824.50.90.00
Final performances	
Type	GP CSII W _c 1
Adhesion	≥ 0,2 MPa
Compressive strength	≥ 1,5 MPa
Water absorption	≤ 0,4 Kg/m ² min ^{1/2}
Water vapor permeability	μ ≤ 15
Thermal conductivity	0,75 W/m·k
Reaction to fire	Euroclass A1
Total VOCs (28 days)	≤ 500 μg/m ³
Radioactivity index (U, Ra, Pb, Th, others)	I = 0,039

* ≤ 0,2 Kg/m²min^{1/2} for GP CSII W_c2 version

Packaging

BEYEM NEOCAL BASE is packed 25 kg plastic lined paper bags.

Storage: when stored unopened in a cool dry place, shelf life is 12 months from date of manufacture.

Cleaning tools

Tools can be cleaned easily with water before the product hardens. Hardened product can be removed only mechanically.

Project specification

Facade rehabilitation of historic and/or protected buildings and stonework grouting, must be carried out with COVs and radiation free, breathable and rainwater-proof rendering lime mortar compliant with EN 998-1- Class GP CSII W_c 1, such as BEYEM NEOCAL BASE manufactured by Rodacal Beyem Company. Coverage will be $\approx 1,6 \text{ kg/m}^2$ per mm of thickness. The substrate must be clean, sound, compact and dimensionally stable. Expansion joints must be respected.

Health and Safety

For further and complete information about the safe use of our product please refer to our latest version of the Safety Data Sheet, which is available upon request.

Disposal of the product and packaging must be in accordance with current legislation. This is responsibility of the final product user.

Certifications



ER-1089/1999



IDI-0004/2012



Contact



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Note

Product for professional use

The above guidelines and information is accurate to the best of our knowledge and is offered in good faith. This information is true and accurate, but as conditions of use and any labor involved are beyond our control, the end user must satisfy himself by prior testing that the product is suitable for his specific application, and no responsibility can be accepted, or any warranty given by our Representatives, Agents or Distributors. End user should ensure that he has our latest literature, copy of which will be sent upon request.